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PRE-APPEAL BRIEF REQUEST FOR REVIEW		Docket Number (Optional) 06005/39537
	Application Number 10/656,005-Conf. #8163	Filed September 5, 2003
	First Named Inventor Gary K. Law et al.	
	Art Unit 2179	Examiner S. B. Theriault
<p>Applicant requests review of the final rejection in the above-identified application. No amendments are being filed with this request.</p> <p>This request is being filed with a notice of appeal.</p> <p>The review is requested for the reason(s) stated on the attached sheet(s). Note: No more than five (5) pages may be provided.</p> <p>I am the</p> <div style="display: flex; justify-content: space-between; align-items: flex-start;"> <div style="width: 60%;"> <p><input type="checkbox"/> applicant /inventor.</p> <p><input type="checkbox"/> assignee of record of the entire interest. See 37 CFR 3.71. Statement under 37 CFR 3.73(b) is enclosed. (Form PTO/SB/96)</p> <p><input checked="" type="checkbox"/> attorney or agent of record. Registration number <u>38,404</u></p> <p><input type="checkbox"/> attorney or agent acting under 37 CFR 1.34. Registration number if acting under 37 CFR 1.34. _____</p> </div> <div style="width: 35%; text-align: center;"> <p>_____ /Jeffrey H. Canfield #38,404/ Signature</p> <p>_____ Jeffrey H. Canfield Typed or printed name</p> <p>_____ (312) 474-6300 Telephone number</p> <p>_____ July 8, 2009 Date</p> </div> </div> <p>NOTE: Signatures of all the inventors or assignees of record of the entire interest or their representative(s) are required. Submit multiple forms if more than one signature is required, see below*.</p>		
<input type="checkbox"/> *Total of <u>1</u> forms are submitted.		

I hereby certify that this paper (along with any paper referred to as being attached or enclosed) is being transmitted via the Office electronic filing system in accordance with § 1.6(a)(4).

Dated: July 8, 2009

Signature: /Jeffrey H. Canfield #38,404/ (Jeffrey H. Canfield)

PRE-APPEAL BRIEF REQUEST FOR REVIEW

Claims 1-79 are pending in the application. Claims 1, 34 and 58 stand rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1, 35 and 49 of U.S. Patent No. 7,269,468 to Law et al. (hereafter "Law"). Further, claims 1-79 stand rejected under 35 USC § 102(e) as being anticipated by U.S. Patent No. 6,834,370 to Brandl et al. (hereafter "Brandl"). Alternatively, claims 1-79 stand rejected under 35 USC § 103(a) as being obvious over Brandl in view of U.S. Patent No. 5,903,886 to Heimlich et al. (hereafter "Heimlich"). On all three grounds applicants respectfully traverse.

Double Patenting

A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical but at least one examined application claim is not patently distinct from the reference claims because the examined application claim is either anticipated by, or would have been obvious over, the reference claims. In determining whether a nonstatutory basis exists for a double patenting rejection, the first question to be asked is - does any claim in the application define an invention that is anticipated by, or is merely an obvious variation of, an invention claimed in the patent? If the answer is yes, then an "obviousness-type" nonstatutory double patenting rejection may be appropriate. (MPEP § 804 II.B.I.)

The claims pending in the instant application do not define an invention that is anticipated by, or is a mere obvious variation of the invention claimed by Law. For example, independent claim 1 of the pending application calls for, among other things, providing a graphical user interface displayed by a display device. The graphical user interface includes a plurality of graphical elements defining input/state pairs. The method of independent claim 1 further calls for receiving state transition data associated with one or more of the plurality of graphical elements via an input device. The state transition data identify one or more next states to which the state machine transitions following conditions in a process plant corresponding to a particular input/state pair defined by at least one of the graphical elements included in the graphical user interface. These features of claim 1 are not anticipated by, nor are they mere obvious variants of, the invention claimed in claims 1, 35, or 49 of Law.

Claims 1, 35 and 49 of Law each call for the configuration of the outputs of a state machine executed in a process control function block. Claim 1 of Law, for example, calls for "providing a first

graphical user interface via a display device to configure values of at least some outputs of a plurality of outputs of a function block for each of at least some of a plurality of states of a state machine, ..., wherein at least some graphical elements of the plurality of graphical elements are associated with respective pairings of ones of the at least some states with ones of the at least some output; wherein at least some of the outputs are to be used, at least in part, to affect one or more physical functions within a process plant; receiving output configuration data via the graphical user interface;...”

Claims 35 and 49 of law each claim similar subject matter.

Claims 1, 35 and 49 of Law relate to only one aspect of the configuration of a state machine implemented in process control function block, namely the configuration of the state machine outputs. Claims 1, 35 and 49 of Law do not claim anything related to configuring the transitions between the states defined by the state machine. Specifically, claims 1, 35 and 49 do not teach receiving state transition data that identify a next state to which the state machine transitions following conditions within a process plant corresponding to an input/state pair defined by graphical elements provided by a user interface as called for in claims 1, 34 and 58 of the present application. Accordingly, claims 1, 34, and 58 of the present application are not anticipated by and are not obvious variants of the invention claimed by Law. Therefore, the obviousness-type double patenting rejection is improper and should be withdrawn.

Rejections under 35 U.S.C. §102(e)

A claim is anticipated under 35 U.S.C. §102(e) only if every element of the claim can be found in a single prior art reference. In the present case, claims 1-79 are not anticipated by Brandl because Brandl does not teach each and every element of any of independent claims 1, 18, 34, or 58.

Claim 1 is exemplary. Claim 1 calls for, among other things, providing a graphical user interface displayed by a display device. The graphical user interface includes a plurality of graphical elements defining input/state pairs associated with a state machine. Claim 1 further calls for receiving state transition data associated with one or more of the plurality of graphical elements via the input device wherein, for each of the one or more of the plurality of graphical elements for which state transition data is received, the state transition data identifies a next state to which the state machine transitions following conditions in a process plant corresponding to the input/state pair defined by the graphical elements.

Brandl does not teach a user interface that includes a plurality of graphical elements defining input/state pairs. Brandl does not teach receiving state transition data associated with one or more of

the plurality of graphical elements via the input device of any type. And Brandl does not teach receiving state transition data that identify a next state to which the state machine transitions following conditions in a process plant corresponding to the input/state pair defined by a particular graphical element.

In the final office action, Examiner cites Brandl column 52, lines 23-35 and column 49, lines 19-25 as well as figs. 35, 72, 74, 84-86 as teaching a graphical user interface displayed by a display device, the graphical user interface including a plurality of graphical elements defining input/state pairs. A review of the cited passages and corresponding figures, however, reveals that Brandl teaches no such things. At col. 52, lines 23-35, Brandl states:

Fig. 84 depicts the Sulferize_UOP:1 unit operation which is the only unit operation 52 underlying the Sulferize_UPC:1 unit procedure 50 and FIG. 85 depicts the detailed procedure for the sulferize unit procedure in PFC format. FIG. 86 depicts the detailed procedure for the esterify unit procedure in PFC format and FIG. 87 depicts the detailed procedure for the separate unit procedure in PFC format. FIG. 88 provides a list of the process actions 62 from the general recipe 44 defined by FIGS. 72, 74, 80, and 81 and the recipe segment 64 for the master recipe 46 that correspond to the process actions of the general recipe.

At col. 49, lines 19-25, Brandl states:

FIG. 72 shows the recipe editor with the Procedure file folder of the general recipe selected in the file folders pane 142 of the editor. The view pane 144 depicts the general recipe 44 depicted as a process dependency chart at the highest level, the process stage level. Again, refer to Appendix 2 for a detailed description of how to read a process dependency chart.

Neither of these passages teaches anything regarding graphical elements that are displayed on a display device and which define input/state pairs associated with a state machine.

The figures cited by the Examiner likewise fail to teach anything regarding graphical elements displayed on a display device defining input/state pairs. Fig. 35 shows “a general recipe of a first example including underlying process actions and process operations.” (Col. 13, lines 57-60.) Fig. 72 shows a “view from the general recipe editor in accordance with preferred embodiments of the invention for the process dependency chart for the general recipe of the second example.” (Col. 15, lines 26-29.) Fig. 74 shows “a view from the general recipe editor in accordance with the preferred embodiments of the invention for process details of the sulfurize process stage for the general recipe of the second example.” (Col. 15, lines 33-36.) Figs. 84-86 show various flowcharts

for a unit operation Sulfurize_OP: 1. (See, col. 16, lines 7-16.) None of these drawings has the slightest relevance to graphical elements that define input/state pairs associated with a state machine.

Next, Examiner points to Figs. 84-86 and 35 as teaching receiving state transition data associated with one or more of a plurality of graphical elements via an input device, where the state transition data identifies a next state to which the state machine transitions following conditions in the process plant corresponding to the input/state pairs defined by the graphical elements. Again, the cited figures teach no such thing!

As mentioned above, Figs. 84-86 are flowcharts depicting a "sulfurize" unit operation. (Col. 16, lines 7-16.) Fig. 35 shows "the general recipe of a first example including the underlying process actions and process operations." (Column 13, lines 58-60). There is absolutely no discussion, disclosure, or representation of a step of receiving state transition data associated with one or more of a plurality of graphical elements via an input device in these figures. What is more, there is no teaching of state transition data that identify the next states to which a state machine transitions following conditions in the process plant corresponding to the input/state pairs defined by the graphical elements, as called for in independent claim 1. The examiner has not identified a single state transition disclosed by Brandl that occurs based on operating conditions in a process plant and which is identified in state transition data corresponding to an input/state pair defined by a graphical element displayed in a graphical user interface.

In response to applicant's previously filed arguments, the Examiner states that "nothing in the claims defined expressly that a state machine has to have three states or that configuration rules are used." The first part of the examiner's statement is true enough, nothing in the claims defined expressly that a state machine has to have three states. But applicants are not arguing that the claims call for a state machine limited to just three states. In Applicants' previous response to the non-final office action submitted on January 29, 2009 Applicants described a state machine having three states for purposes of illustration only. Nowhere do applicant's imply that a state machine according to the present invention must be limited to a state machine having just three states. The second part of examiner's statement, that nothing in the claims defined that configuration rules are used, is contrary to the plain language of claim 1 itself. The preamble of claim 1 states that "the state machine defines a plurality of states, and wherein the state machine transitions between states based on state machine configuration data and one or more state machine inputs." Furthermore, the claim calls for receiving state transition data that identify the next state to which the state machine transitions following conditions in the process plant corresponding to

input/state pairs defined by graphical elements displayed by a graphical user interface. In their previous response Applicant's referred parenthetically to such configuration data as "rules." Although the word "rules" does not appear in the claims, it is clear that the state transition data called for in the claims define how and when the state machine transitions between states based on conditions within the process control plant. The meaning "state transitions data" should be clear from the language of the claim itself. Furthermore, such state transition data simply are not disclosed by Brandl at all. Accordingly, claim 1 and the claims depending there from are not anticipated by Brandl under 35 USC §102(e) and should be allowed.

Independent claims 18, 34, and 58 each contain features similar to those of independent claim 1, and are allowable for the same reasons.

Rejections under 35 USC §103(a)

Finally, we turn to the rejection of claims 1-79 under 35 USC §103(a) as being unpatentable over the combined teaching of Brandl and Heimlich. As described above with regard to the rejections under 35 USC §102 (e), Brandl does not teach all of the features of any of the independent claims. Heimlich is cited as teaching a process that can be composed of a series of tasks (Column 3, lines 55-67; column 9, lines 1-67; column 10 lines 1-40; and column 24, lines 1-67.) Further, Heimlich is cited as teaching a process that can be composed of series of tasks, where the process flows specifically contain an input pair into a state machine. (Figs. 9, 10 a-c, 11 a-c, and 13.) Applicants would argue that the cited passages and figures from Heimlich do not teach the features attributed to them by the examiner. Even if it did teach such features, however, Heimlich would still fail to disclose the features of the independent claims that are absent from the teaching of Brandl as described above. Thus, even when Brandl and Heimlich are combined, they fail to teach each and every element of any of the claims pending in the present application. Therefore the claims are non-obvious over Brandl and Heimlich and should be allowed.

Conclusion

Based on the arguments provided above Applicants respectfully submit that all of the claims pending in the present application are in condition for allowance. Applicants respectfully request that the members of the pre-appeal brief review conference overturn the final rejection and allow the claims to issue.

Respectfully submitted,

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